

REMARKS

Claims 1 and 19 are amended above. With the proposed changes, claims 1-26 will be pending. The present response adds, changes and/or deletes claims in this application. A detailed listing of these revisions is presented, with an appropriate defined status identifier of all claims that are or were in the application, irrespective of whether the claim(s) remain under examination.

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and these remarks.

Objection to the Claims

The Office Action objected to claim 1 for an informality. Claim 1 has been amended to overcome such objection, and Applicant requests withdrawal of the objection.

Rejection Under 35 U.S.C. §112

The Office Action has rejected claims 1-26 as indefinite. Specifically, the Office Action states that claims 1 and 19 include indefinite limitations. Applicant believes that the stated grounds for these rejections are obviated by the foregoing claim amendments.

Objections Under 35 U.S.C. §103

The subject matter of the various claims is commonly owned. Accordingly, there are no changes in inventor or invention dates of the claims.

The Office Action has rejected claims 1-7, 11, 17-22 and 24-26 as being obvious over Sing (U.S. patent No. 6,146,667). Specifically, the Office Action states that Sing discloses:

- (1) introducing an inoculum of at least 10^9 CFU/g to a culture medium,
- (2) growing the cells in the culture medium, resulting in a medium with at least 10^7 CFU/g,
- (3) propagating the cells to produce a starter culture with 10^9 CFU/g,

- (4) harvesting the starter cells, and
- (5) adding the starter cells to milk to produce a dairy product.

The Office Action also states that Sing does not disclose the following claim recitations:

- (A) dividing the inoculum into subsets,
- (B) distributing the subsets to customers,
- (C) “quantities sufficient” limitations,
- (D) rates of inoculation, and
- (E) dairy products.

Despite the acknowledged deficiencies of Sing, the Office Action concludes, without supporting citation or logic, that each of these limitations would have been well known to a skilled artisan. Applicant respectfully disagrees and traverses this rejection.

Sing discloses a two-step method to produce a cultured dairy product. Step 1 is said to decrease growth time of a starter culture by means of a starting inoculum that has a relatively high cell density of at least about 10^9 CFU/g. Step 2 discloses adding the starter culture to milk. Sing fails to disclose a preliminary step as presently claimed, namely, providing direct inoculation material for direct, one-step inoculation. The direct inoculation material, as recited, are the subsets of concentrated inoculum material. These subsets can be used to practice the method disclosed by Sing, but are not taught or suggested by Sing.

In particular, Sing does not disclose the preliminary step of mechanically concentrating primary inoculation material (*e.g.*, an inoculum material comprising a concentrate of starter culture) and dividing the concentrated inoculum material into subsets. Mechanical concentration of the inoculum material ensures that the subsets are sufficiently concentrated such that they can be used for direct, one-step inoculation of a cultivation medium.

The concentrated inoculum material is then divided into subsets, which is also not disclosed by Sing. The subsets may be stored in suitable containers. For example, storage of the inoculum material containing containers are carefully frozen to approximately -50°C. The inoculum material can then be stored until it is needed. The subsets of inoculum material (direct inoculation material) may be used for the production of additional starter cultures by direct, one-step inoculation at the same location or at a distant location (*e.g.*, Steps 1 and 2 of Sing).

Nothing in Sing or in any cited document suggests a method for supplying a starter culture, as claimed by Applicant; nor do they suggest or motivate one skilled in the art to that end. While acknowledging that the cited art does not show dividing a concentrated inoculum material into subsets, the Office Action makes that unsupported assertion that such a step would have been obvious. Yet broad, conclusory statements regarding the teaching of multiple references, standing alone, are not “evidence.” *In re Dembicza*k, 175 F.3d 994, 999 (Fed. Cir. 1999). The Office cannot simply use the inventor’s disclosure as a blueprint for piecing together the prior art to defeat patentability: this is the essence of hindsight, as certainly applied here. *In re Dembicza*k, 175 F.3d 994, 999 (Fed. Cir. 1999).

Indeed, the inventors of the present invention found, surprisingly, that the claimed methodology is extremely efficient. By use of the preliminary steps mentioned above, (1) the rate of contamination in batches is reduced, (2) there is a higher consistency of the quality between batches, (3) there is less variation between batches, and (4) there is a much higher flexibility both in-house and between factories locally or distant.

Applicant therefore submits that no permutation of Sing with the other cited documents (Czulak et al., Lizak, Vandenberghe et al., Matsumiya et al. or Rimler et al.) renders claim 1 obvious, within the meaning of Section 103. In addition, Applicant has chosen to delete “supplying, when required, … customer in need of a starter culture” from claim 1, since the phrase in question describes a preferred method of supplying a starter culture of consistent quality. The deleted language is not required for patentability, however.

Applicant believes that the present application is now in condition for allowance.
Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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